

137832



992 OLD EAGLE SCHOOL ROAD
SUITE 916
WAYNE, PENNSYLVANIA 19087
(215) 687-9510

ORIGINAL
(Red)

September 28, 1984
R-585-4-4-32
68-01-6699

Mr. Harold Byer
U.S. Environmental Protection Agency
Sixth and Walnut Streets
Philadelphia, PA 19106

Subject: Peer Review Comments
TDD No. F3-8403-07
Rhinehart Tire Dump
Winchester, Virginia

Dear Mr. Byer:

Submitted herewith are the responses to the peer review comments for the subject project made by Darius Ostrauskas.

- o Revisions have been made to the cover letter as requested.
- o The summary has been revised as requested.
- o The Emergency Response Team has been removed from section 2.2.
- o In section 2.6, the estimate of the volume of materials remaining on site as of April 2, 1984, was made by Mac Sterrett of the Virginia Water Control Board (refer to appendix F). The last sentence has been changed as per request (refer to revision in text for clarification).
- o The geology of the vicinity has been more accurately stated in section 3.2.
- o The soil survey has not been completed for this county. A description of the soil has been added to section 3.2 based on field work performed by Thomas Stone of IT Corporation.
- o The Chemung Formation is 1,500 feet thick in this area. The underlying formation is the Brailler which is composed of a greenish-brown micaceous shale with thin intercalated layers of fine-grained gray sandstone according to the Commonwealth of Virginia Department of Conservation and Economic Development, Division of Mineral Resources map (see appendix E).
- o A more accurate description of the overburden has been provided in section 3.2.

Mr. Harold Byer
U.S. Environmental Protection Agency
September 28, 1984
Rhinehart Tire Dump
Page 2

- o The aquifer, for our purposes, consists of the Chemung Formation.
- o The statements describing the shallow and deep zones are misleading. The only formation involved is the Chemung. The nature of the aquifer has been clarified in the section 3.3.
- o Greater conductivity in the deeper zone has been explained in section 3.3.
- o The deep zone, as described in section 3.3, is erroneous and has been clarified. The 7 wells installed by IT Corporation have bottom elevations which cover a 168 foot range. Because the wells were placed on a hill-side, it is difficult to say just what zones within the Chemung are monitored without having the wells surveyed in and plotted on a topographic cross section of the area. This type of information may be available from IT Corporation once they have finalized their report.
- o No groundwater flow direction maps are available for the site area. Groundwater flow direction was estimated based on the structure of the formation in the site area.
- o It has been indicated in section 3.7 that 40 homes account for an estimated 152 residents (3,840) and that all of these residents draw from the aquifer of concern.
- o Sections 3.6 and 3.7 have been revised as per received comments (refer to text for clarification).
- o The last sentence in section 4.0 has been revised based on received comments (refer to text for clarification).
- o The site inspection and preliminary assessment forms have been corrected accordingly.

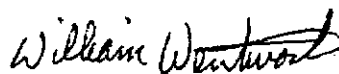
If you have any questions, please contact me.

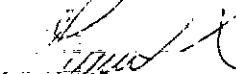
Respectfully submitted,

Reviewed by,

Approved by,


Richard Gorrell
Environ. Engineer


William Wentworth
Asst. Manager, Reports


Garth Glenn
Manager, FIT III

DW/ral

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III - 6th & Walnut Sts.
Philadelphia, Pa. 19106ORIGINAL
(Red)

SUBJECT: Request Assistance from FIT Office

DATE: 9/20/84

FROM: Darius Ostrauskas, *D.O.*
Site Investigation and Support Section(3HW23)TO: Butch Byer, FIT Coordinator
Site Investigation and Support Section(3HW23)THRU: Edmund Skernolis, Chief
Site Investigation and
Support Section (3HW23)I. SITE NAME: Rhinehart Tire Fire Dump (VA-278)
DSNII. LOCATION: Winchester, VA

III. WORK ASSIGNMENT:

☒ Preliminary Assessment
☒ Site Inspection
☐ Hazard Ranking System
☐ Toxicology Assessment☐ Quality Assurance Review of Data
☐ Re-Sampling/Full Field Investigati.
☒ Peer Review Corrections
☐ Other (See VI below)

IV. PRIORITY:

☒ High(*) ☐ Medium ☐ Low

V. Preferred Deadline:

Date: by end of Sept.

VI. EXPLANATION OF TASK (* To include justification for high priority):

See peer review comments
by Darius Ostrauskas (3 pgs.)

VII. To be completed by FIT Coordinator only:

Task complete date by FIT: Sept 28, 84

Hours allocated:

*FIRM**Butch*
9/20
AR100401

Rhinehart Tire Fire
Winchester, VA
Desk Top PA/SL
August 17, 1984

TDD # F3-8403-07

EPA no. VA-278

Comments by: MAP

For: Darius O

Sept. 19, 1984

1.3 Summary

This whole section could stand rewording - 3rd paragraph especially. There are many grammatical errors and wording is such that intent is unclear.

Ground water monitor wells are constructed around the site. Development is something done to the wells to ensure they are functioning properly.

3.2 Geology and Soil

Separate Geology from soil! Geology and soil are two separate entities. Geological Studies have nothing to do with soils. Also grey shales and sandstones of Devonian Age are not soils either!

- How thick is the Chemung Formation, any other formations beneath it?
- Any structural features present?
- What does the 20-30 feet of overburden consist of?

3.3 Groundwater

- Does the aquifer have a name?
- Are the different zones considered separate aquifers or do they act as one?
- How do you know there's contamination in the deeper zone, when the deepest monitor well is only 71.5 feet and the deeper zone you refer to is 100-300 ft. deep?
- Groundwater flow directions are given, with water level information in Appendix E. Where are the flow direction maps generated to get this information? Maps should be included for each time water level measurements were taken.

Rhinchart Tire Fire Dumps (note: name change)

Original
(copy)

Peer Review by: Darrin Ostrander 9/20/84

✓ Cover letter:

On Feb 13, 1984, the site owner consented to a CERCLA
Section 106 order, ^{issued by EPA} requiring control of runoff on-site.

(this should replace the current statement)
(~~other order was not for remedial action~~)
delete second statement on consent order, remedial action

§p. 1-1, Sec. 1.3

should read: data and reports supplied by the EPA On-Scene
Coordinator (OSC) and the EPA Environmental Response Team (E

should read: On October 31, 1983, the tire dump caught fire
and subsequently burned till _____,

§p. 1-2, Sec. 1.3

should read: EPA OSC subsequently authorized the construction
of several containment basins...

• sentence regarding order should read as in cover letter

• should read: wells were constructed in and around the disposal area.

§p. 2-1, Sec. 2.2

• again, EPA OSC authorized construction...

§p. 2-2, Sec. 2.6

• who estimated 20% remained as of 4/2/84?

• again, consent order is for control of runoff

AR100404

p. 3-1, Sec. 3.2

- geology in vicinity is characterized by gray shales..., not soil
- what about nature of soils? (consult Tim Stone, soil survey, etc)
- how thick is Chemung? formations beneath?
- what is the nature of the 20-30 overburden?

Sec. 3.3

- doesn't the aquifer for our purposes consist of the Chemung?
- are the so-called shallow and deep zones part of the Chemung?
- any explanation for greater conductivity in deeper zone?
- considering the deepest well is 71.5 ft, how do you know the "deep zone" is contaminated? (100-300 ft deep?)
- no maps of ground water flow direction (as generated with water level info in Appendix Eth)?

p. 3-2, Sec. 3.4

- please indicate that approximately 40 houses (or 152 people) draw from the aquifer of concern (for drinking water) within a 3 mile radius
- for our purposes, the aquifer of concern is represented by the Chemung Formation

p. 4-1, Sec. 4.0

should read: These oils were in part contained...

~~An undetermined quantity of oil remaining on~~ AR400405
An undetermined quantity of oil has infiltrated the ground.

Si. form

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peer review DO. 9/20/

Part 1, III

should read: Inspection initiated by EPA OSC and ERT

Part 2, II

compute quantity in drums

Part 3

IIA - Population to be potentially affected determined by HRS
to be about 152 people.

IB. ... evidence of contamination of intermittent stream.

IC. same as A

IM. potential - order issued to provide containment via
control of runoff

Part 4

III. 400,000 gals for surface impoundment? what does this
mean? is there actually 400,000 gals currently on-site?
why not check off piles of waste? (unknown quantity)

Part 5

III. 02. est. 152 (3 mile radius)

VII list all sources of information for VI eg permeabilities

PA form

IA check liquid

VII B ~~and~~ N/A

IX. clarify statement on runoff containment.
I thought 800,000 gals were collected.

AR100406